CLAIMS

1. Process for the extraction of energy from flue gases of a furnace which is operated with a fuel and which is used in a process for the production of melamine, the process comprising a first heat exchange step in which the flue gases are heat exchanged with a first process stream, characterized in that the flue gases are heat exchanged with a second process stream in a second heat exchange step.

2. Process according to claim 1, further comprising a third heat exchange step in which the flue gases are heat exchanged with fresh air.

3. Process according to claim 1 or 2, wherein the furnace is a salt furnace.

4. Process according to claim 3, wherein in the first heat exchange step the flue gases exchange heat with molten salt, and wherein in the second heat exchange step the flue gases exchange heat with a process stream which consists essentially of ammonia.

5. Process according to claim 3, wherein in the first heat exchange step the flue gases exchange heat with molten salt, and wherein in the second heat exchange step the flue gases exchange heat with a process stream which consists essentially of urea.

6. Process according to claim 1 or 2, comprising a fourth heat exchange step in which a process stream is heat exchanged with the flue gases, with the process stream which is supplied to the fourth heat exchange step having a higher temperature than the flue gases which are supplied to the fourth heat exchange step.

7. Apparatus for supplying process heat in a process for the production of melamine, comprising a salt furnace which includes a heat exchange unit in which salt is heated, characterized in that the apparatus includes at least one further heat exchange unit which directly or indirectly heats a process stream.

8. Apparatus according to claim 6, which includes as further heat exchange unit a heat exchange unit for the direct heating of a process stream which consists essentially of ammonia or urea.

9. Apparatus according to claim 6 or 7, which further contains a heat exchange unit for heating fresh air.

10. Process for optimizing an existing apparatus for the supply of process heat from flue gases in a process for the production of melamine, characterized in

that at least one heat exchange unit is added for the direct or indirect heating of a process stream.

11. Process according to claim 9, in which the added heat exchange unit is used for the direct heating of a process stream which consists essentially of ammonia or urea.